



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/789,861

02/27/2004

James M. Campos

071855-00002

8466

64199

7590

12/04/2008

WARD AND SMITH, P.A.

1001 COLLEGE COURT

P.O. BOX 867

NEW BERN, NC 28563-0867

EXAMINER

SCHAETZLE, KENNEDY

ART UNIT

PAPER NUMBER

3766

MAIL DATE

DELIVERY MODE

12/04/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Ex parte JAMES M. CAMPOS and BRUCE D. ROWE

Appeal 2008-5077
Application 10/789,861
Technology Center 3700

Decided: December 4, 2008

Before DEMETRA J. MILLS, ERIC GRIMES, and
FRANCISCO C. PRATS, *Administrative Patent Judges*.

PRATS, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 involving claims to methods and apparatuses for developing strength in a muscle. The Examiner has entered two rejections for anticipation and one for obviousness. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm one of the anticipation rejections and reverse the other. We also reverse the obviousness rejection.

STATEMENT OF THE CASE

Claims 1-14 are pending (App. Br. 3). The Examiner has objected to claim 7 as being dependent on a rejected base claim, but allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims (Final Rejection 3).

Claims 1-6 and 8-14 stand finally rejected and are the subject of this appeal (App. Br. 3). Claims 1 and 8 are illustrative of the appealed subject matter and read as follows:

1. A method of developing strength in a muscle used while a user grips and moves a moveable instrument, comprising applying a stimulating signal to a hand of the user gripping the moveable instrument that includes an electrode configured to apply the signal, wherein the signal is applied while the user moves the instrument and develops the muscle while the instrument is in motion.
8. An apparatus for developing strength in a muscle, comprising:
 - a moveable instrument to be gripped and held by a user;
 - a stimulator in communication with the moveable instrument configured to produce a signal for transcutaneous delivery to the muscle via a hand of the user, wherein the signal is delivered as a user moves the moveable instrument to develop the muscle while the instrument is in motion.

The Examiner applies the following documents in rejecting the claims:

Guasco	US 1,558,351	Oct. 20, 1925
Mills	US 4,930,785	Jun. 5, 1990
Poulton	US 5,702,323	Dec. 30, 1997

The following rejections are before us for review:

Claims 1, 6, 8-10, and 12-14 stand rejected under 35 U.S.C. § 102(b) as anticipated by Guasco (Ans. 3).

Claims 8, 11, and 14 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Mills (Ans. 3-4).

Claims 1-5 stand rejected under 35 U.S.C. § 103(a) as being obvious in view of Poulton (Ans. 4-5).

ANTICIPATION -- GUASCO

ISSUE

The Examiner's anticipation rejection over Guasco reads as follows: "Performance of the Guasco method inherently develops strength in a muscle since muscle is being activated in the writing process. As disclosed and claimed, the applicant considers a writing instrument to constitute an acceptable movable instrument for developing muscle strength" (Ans. 3).

Appellants contend that Guasco "does not disclose the various features recited in claims 1, 6, 8-10 and 12-14. As such, the rejections thereof should be reversed" (App. Br. 9).

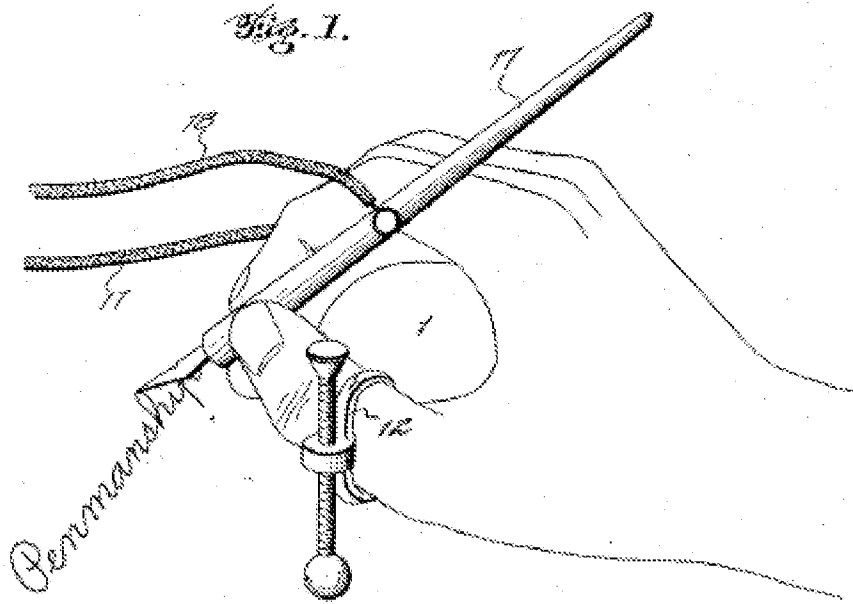
The issue with respect to this rejection, therefore, is whether the Examiner erred in finding that Guasco meets all of the limitations recited in claims 1, 6, 8-10, and 12-14.

FINDINGS OF FACT ("FF")

1. Guasco discloses "a rest for the hand of a writer holding a pen, . . . in which the improvement provides two electrodes suitably wired so that a mild flow of electricity will, at desired intervals be passed through the hand of the penman to alleviate the cramped muscles and thereby overcome writers' cramps" (Guasco, p. 1, ll. 14-20).

2. Guasco's device includes "a semi-spherical support having spaced depending legs, and adjustable elements for contacting the surface on which the writing is made, as well as means for supporting the thumb of the writer" (Guasco, p. 1, ll. 22-27).

3. Figure 1 of Guasco, reproduced below, "is a perspective view illustrating the application of" the Guasco device:



The figure shows "semi-spherical metal member 1 that is designed to be received in the palm of the writer's hand" (Guasco, p. 1, ll. 48-50). The figure also shows "metal penholder 17, and to the pen holder there is attached a . . . wire 18 for the electric circuit. The wires 17 and 18 are connected to a battery (not shown), and the circuit therethrough is controlled by a switch (also not shown)" (*id.* at p. 1, ll. 87-93).

4. Guasco discloses that "when the writer's hand becomes cramped . . . [t]he current is then turned on and is caused to flow through the writer's

fingers, hand and wrist The pen 17 is thus in the nature of an electrode” (Guasco, p. 1, ll. 99-108).

PRINCIPLES OF LAW

“To anticipate a claim, a prior art reference must disclose every limitation of the claimed invention, either explicitly or inherently.” *In re Schreiber*, 128 F.3d 1473, 1477 (Fed. Cir. 1997).

Thus, “[n]ewly discovered results of known processes directed to the same purpose are not patentable because such results are inherent.” *Bristol-Myers Squibb Co. v. Ben Venue Labs., Inc.*, 246 F.3d 1368, 1376 (Fed. Cir. 2001).

The Examiner cannot establish inherency merely by demonstrating that the asserted limitation is probable or possible. *In re Oelrich*, 666 F.2d 578, 581 (CCPA 1981). “If, however, the disclosure is sufficient to show that the natural result flowing from the operation as taught would result in the performance of the questioned function, it seems to be well settled that the disclosure should be regarded as sufficient.” *Id.* (quoting *Hansgirk v. Kemmer*, 102 F.2d 212, 214 (CCPA 1939)).

Regarding apparatus claims, it is “well settled that the recitation of a new intended use for an old product does not make a claim to that old product patentable.” *Schreiber*, 128 F.3d at 1477. Thus, functional limitations directed to intended uses in an apparatus claim do not serve to distinguish the claimed apparatus from prior art apparatuses inherently capable of performing the claimed function. *See id.* at 1478-79 (holding that a prior art apparatus meeting all claimed structural limitations was anticipatory because it was inherently capable of performing the claimed function).

Moreover, as stated in *In re Best*, 562 F.2d 1252, 1255 (CCPA 1977) (quoting *In re Swinehart*, 439 F.2d 210, 212-13 (CCPA 1971)):

[W]here the Patent Office has reason to believe that a functional limitation asserted to be critical for establishing novelty in the claimed subject matter may, in fact, be an inherent characteristic of the prior art, it possesses the authority to require the applicant to prove that the subject matter shown to be in the prior art does not possess the characteristic relied on.

See also, In re Spada, 911 F.2d 705, 708 (Fed. Cir. 1990) (“[W]hen the PTO shows sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not.”).

During examination, the PTO must interpret terms in a claim using “the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in the applicant’s specification.” *In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997).

ANALYSIS

Appellants’ arguments do not persuade us that the Examiner erred in finding that Guasco meets all of the limitations recited in claims 1, 6, 8-10, and 12-14.

With respect to claim 1, Appellants contend that the method “uses a signal configured with particularity to develop strength in a muscle while a user manipulates a device from which the strength-developing signal is received” (App. Br. 9). Appellants argue that the Examiner erred in finding that Guasco’s electrical current inherently builds muscle because Guasco

instead discloses that its signal relaxes muscles to alleviate writer's cramp (*id.* at 10).

We are not persuaded by these arguments. The preamble of claim 1 recites that the claimed process is intended to “develop[] strength in a muscle used while a user grips and moves a movable instrument.” The claim also requires that when “a stimulating signal” is applied to the hand of a user gripping the instrument, the signal “develops the muscle while the instrument is in motion.”

To achieve these intended results, claim 1 recites the sole positive process step of “applying a stimulating signal to a hand of the user gripping the moveable instrument that includes an electrode configured to apply the signal, wherein the signal is applied while the user moves the instrument.” As required by claim 1, Guasco applies a stimulating signal, an electrical current, to the hand of a user gripping a moveable instrument, a pen, that includes an electrode configured to apply the signal (*see* FF 1, 3, 4). As also required by claim 1, the signal is applied to the pen while the user is writing (*see* FF 2, 3).

Because Guasco uses a claim-encompassed device to deliver a stimulating signal to the claimed body part of the user, in the manner claimed, we agree with the Examiner that it was reasonable to find that Guasco's process also achieved the claimed result of “develop[ing] the muscle,” particularly in view of the fact that claim 1 encompasses any degree of muscle development. Given the reasonableness of the Examiner's finding of anticipation, the burden shifted to Appellants to show non-anticipation. *See Best*, 562 F.2d at 1255; *Spada*, 911 F.2d at 708.

Appellants do not point to, nor do we see, any convincing evidence of record rebutting the Examiner's reasonable finding of anticipation. We note that Guasco discloses that its electrical current is intended to alleviate writer's cramp (*see* FF 1, 4). While that disclosure is evidence that Guasco's electrical current is a "stimulating signal" that affects muscle, as required by claim 1, we see nothing in Guasco suggesting that its cramp-alleviating electrical current would fail to develop muscle to the minimal degree required by claim 1. *Cf. Bristol-Myers Squibb*, 246 F.3d at 1376 ("Newly discovered results of known processes directed to the same purpose are not patentable because such results are inherent.")

In sum, we find that Appellants have failed to adequately rebut the Examiner's *prima facie* case of anticipation with respect to claim 1. We therefore affirm the Examiner's rejection of that claim as anticipated by Guasco. Because Guasco's pen is a writing instrument, we also affirm the Examiner's rejection of claim 6, which depends from claim 1.

Similar to their arguments with respect to claim 1, Appellants contend that the Examiner erred in finding that Guasco meets the limitations of claim 8 because Guasco's electrical current is intended to alleviate writer's cramp, and not to develop muscle (App. Br. 11). For reasons similar to those discussed above, we do not find this argument persuasive.

Specifically, as required by claim 8, Guasco's apparatus has a grippable moveable instrument (a pen) and a stimulator (an electrode) in communication with the pen, the stimulator being capable of producing a signal (the electrical current) that is delivered transcutaneously to the user's hand during movement of the pen (*see* FF 1, 3, 4). Because Guasco meets all of the structural requirements of the apparatus of claim 8, and also

discloses that the electrical current is delivered in a manner that affects the user's muscles sufficiently to alleviate cramps (FF 1, 4), we agree with the Examiner that it was reasonable to find that Guasco's apparatus was capable of delivering the current in a manner that would "develop the [user's] muscle while the instrument is in motion," as required by claim 8.

Appellants do not point to, nor do we see any convincing evidence rebutting the Examiner's reasonable finding of anticipation. We therefore affirm the Examiner's rejection of claim 8 as anticipated by Guasco. Because Guasco explicitly discloses using an electrode to deliver the current to the grip of pen (FF 1, 4), and using a switch to affect the input of the current (FF 3), we also affirm the Examiner's rejection of claims 9, 10, and 12-14.

ANTICIPATION -- MILLS

ISSUE

Claims 8, 11, and 14 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Mills (Ans. 3-4).

The Examiner finds that "the vibration means (motor, eccentric weight, etc.) of Mills . . . constitute[s] a stimulator. While the intended use of developing muscle strength was considered, such functional limitations fail to saliently distinguish over the golf club apparatus of Mills which is also capable of developing muscle strength" (*id.*).

Appellants contend that Mills' device does not anticipate claim 8 because "[t]he sensor and signal in *Mills* merely alerts the user using vibrations if their grip is incorrect. *Mills* does not disclose a signal configured to build muscle strength. Furthermore, *Mills* does not teach

applying an electrical signal configured to develop muscle while a golf club is in motion” (App. Br. 13).

The issue with respect to this rejection, then, is whether the Examiner erred in finding that Mills meets the limitation in claim 8 requiring the apparatus to have a stimulator “configured to produce a signal for transcutaneous delivery to the muscle via a hand of the user, wherein the signal . . . develop[s] the muscle while the instrument is in motion.”

FINDINGS OF FACT

5. Mills discloses that a recognized problem in golf is that increasing the pressure of the grip of the right hand during the swing “has a deleterious effect on the golfer’s swing in several respects. The improper swing results in problems in both accuracy and distance” (Mills, col. 1, ll. 16-18).

6. Mills discloses an device which “includes elements for alerting the user that the right hand thumb pressure has increased during the swing and accordingly allows the golfer to overcome the problem of increasing the right hand pressure” (Mills, col. 1, ll. 19-23).

7. Mills’ device is a golf club that has “a switch on the club handle disposed adjacent to the thumb of the right hand for sensing an increase in right hand pressure during the golf club swing. An output signal is provided within the golf club shaft in response to improper grip pressure during the swing” (Mills, col. 2, ll. 38-43).

8. When a golfer grips Mills’ device too tightly, an electrical connection is made that causes a small motor inside the golf club shaft to rotate an “output shaft” (Mills, col. 5, ll. 29-35). The output shaft has an eccentric weight at its end that, when so rotated, causes the shaft of the club to vibrate,

“which will be noticeable to the golfer” (*id.* at col. 5, l. 38; *see also* Figure 2).

ANALYSIS

We agree with Appellants that the Examiner erred in finding that Mills meets the limitation in claim 8 requiring the apparatus to have a stimulator “configured to produce a signal for transcutaneous delivery to the muscle via a hand of the user, wherein the signal . . . develop[s] the muscle while the instrument is in motion.”

The Examiner finds that Mills’ vibration is a signal that develops muscle because “the mere act of providing a vibrating grip *during the swing* . . . inherently acts to develop muscle. One must enlist muscle in order to grip a vibrating club to counter the various forces at play or risk losing one’s grip” (Ans. 8-9 (citation omitted)). The Examiner also contends:

One can also argue that the way a person grips the club necessarily affects the types of muscles enlisted and the contributions of each muscle to the swing. A proper grip may, for example, result in a posture that favors particular muscles over those enlisted in an improper grip –thus enabling one to more strongly swing the club for better driving distance. A proper grip may, for example, cause a more complete rotation of the wrist or torso, thus maximizing the force of the swing and developing the proper swing muscles as opposed an improper grip that may enlist muscles that may counter or lessen the effectiveness of the swing.

(*Id.* at 9.)

The Examiner’s arguments do not persuade us that Mills meets the limitation in claim 8 requiring the device’s stimulator to be configured to deliver a signal capable of developing muscle. Specifically, while we agree with the Examiner that claim 8 does not require the signal to be an electrical

one, claim 8 does in fact require the claimed apparatus' stimulator to be "configured to produce a signal for transcutaneous delivery to the muscle via a hand of the user, wherein the signal . . . develop[s] the muscle while the instrument is in motion."

Given this language, we interpret claim 8 as encompassing apparatuses that produce signals that, in and of themselves, cause muscle development outside of any muscle development caused by movement of the instrument. In contrast, the muscle development urged by the Examiner as being caused by Mills' vibrating signal would in actuality be caused by the user's manipulation of the vibrating club. That is, in the examples advanced by the Examiner, it is not the signal that develops the muscle, it is the user's movement of the club that causes the muscle development.

We therefore do not agree with the Examiner that Mills' vibrating device meets the limitation in claim 8 requiring a stimulator configured to deliver a signal that develops muscle. Because we do not agree with the Examiner that Mills meets all of the limitations in claim 8, we reverse the Examiner's rejection of claim 8, and its dependent claims 11 and 14, as anticipated by Mills.

OBVIOUSNESS -- POULTON

ISSUE

Claims 1-5 stand rejected under 35 U.S.C. § 103(a) as being obvious in view of Poulton (Ans. 4-5).

The Examiner cites Poulton as disclosing a method that includes electrically stimulating muscles to enhance exercise (*id.* at 4). The Examiner also cites Poulton as disclosing that "many different exercises and tactile actuators for creating sensations and forces may be incorporated into the

method, including arm wrestling (note col. 11, lines 6-31) which involves gripping an opponent's hand (or machine 'hand' or 'arm' as recited by Poulton)" (Ans. 4). The Examiner finds that:

In such a system, it would have been considered blatantly obvious to include an electrode on the arm element gripped by the exerciser in order to enable electrostimulation of the user's hand to emulate the actual sensations of an arm wrestling event (see for example the text abridging cols. 13 and 14), as well as feedback of patient generated forces to the machine in order to control operation, since clearly the hand would be an important location for simulating the forces associated with an arm wrestling activity.

(*Id.*).

Appellants argue that the signals produced in Poulton's exercise methods "do not, themselves, build muscle. Instead, they encourage a user to exercise and build muscle (on their own) by making a virtual reality environment seem more real" (App. Br. 15 (citing Poulton col. 9, ll. 60-64 and col. 11, ll. 1-5)). Thus, Appellants argue, "there is no electric signal present in *Poulton* that is configured to build muscle irrespective of whether the user exercises in the virtual environment" (App. Br. 16).

The issue with respect to this rejection, then, is whether the Examiner erred in finding that Poulton would have suggested to a person of ordinary skill an exercise method in which a stimulating signal is applied via an electrode in a moveable instrument to a user's hand gripping the instrument, wherein the signal develops the muscle while the instrument is in motion, as recited in claim 1.

FINDINGS OF FACT

9. Poulton discloses a training and exercise system in which the user is subjected to a number of different physical and sensory stimuli (Poulton, col. 3, l. 64, through col. 4, l. 47). Thus, “[f]or example, sensations may replicate, from synthesized or sampled data, a cycling tour through varied terrain and vegetation, a rocket launch, a tail spin in an aircraft, a flight by aircraft including takeoff and landing. Sensations may be presented for maneuvers such as aerobatics” (*id.* at col. 4, ll. 48-53).

10. Poulton discloses that “[s]timuli provided to a user may be provided in a variety of forms, including electromuscular stimulation” (Poulton, col. 5, ll. 4-5).

11. Poulton discloses that “electromuscular stimulation may be employed to enhance the contraction or extension of muscles beyond the degree of physiological stimulation inherent in the user” (Poulton, col. 5, ll. 21-24).

12. For example, Poulton discloses:

Electromuscular stimulation apparatus **100** may be worn to assist a user to exercise at a speed, or at an exertion level above that normally experienced. Alternatively, the EMS may be worn to ensure that muscles do experience total exertion in a limited time. Thus, for example, a user may obtain a one hour workout from **30** minutes of activity. Likewise, in the above examples of two competitors, one competitor may be handicapped. That is one user may receive greater exertion, a more difficult workout, against a lesser opponent, without being credited with the exertion by the system. A cyclist may have to exert, for example, ten percent more energy that would actually be required by an actual course. The motivation of having a competitor close by could then remain, while the better competitor would receive a more appropriate workout. Speed, energy, and so forth may also be similarly handicapped for martial arts contestants in the above example.

(Poulton, col. 17, ll. 41-58).

13. Poulton further discloses that “sensory impact may be provided by actuators electrically stimulating muscles or muscle groups to simulate forces imposed on bodily members by outside influences. Thus, a virtual baseball may effectively strike a user. A martial arts player may strike another from a remote location by electromuscular stimulation” (Poulton, col. 5, ll. 24-30).

14. Poulton discloses that the system may also have “tactile actuators [which] may include a pressure actuator. For example, a panel, an arm, a probe, or a bladder, may have a surface that may be moved with respect to the skin of a user” (Poulton, col. 11, ll. 6-9)

15. Poulton discloses that by using the pressure actuators

[A] user may be made to feel a force exerted against the inside of a user’s palm or fingers in response to a grip. Thus, a user could be made to feel the grip of a machine by either a force, or a displacement of the articulated members. Conceivably, a user could arm wrestle a machine. Similarly, a user could arm wrestle a remote user, the pressure actuator **104**, force actuator **106**, or position actuator **108** inherent in a tactile actuator providing displacements and forces in response to the motion of a user. Each user, remote from each other, could nevertheless transfer motions and forces digitally across the worldwide web between distant systems **10**.

(Poulton, col. 11, ll. 20-31; *see also* Figure 1.)

16. Poulton discloses:

[A] stimulus signal for a force actuator **106** or a pressure actuator **104** may be a pressure exerted on the skin of a user by the respective actuator **90**. A stimulus signal **146** may be a heat flow or temperature driven by a temperature actuator **100**. A

stimulus signal **146** of an electromuscular actuator **100** may actually be an electric voltage, or a specific current.

That is, an electromuscular actuator **100** may use application of a voltage directly to each end of a muscle to cause a natural contraction, as if a nerve had commanded that muscle to move. Thus, an electromuscular actuator **100** may include a power supply adapted to provide voltages to muscles of a user.

(Poulton, col. 13, l. 61, through col. 14, l. 6; *see also* Figure 1.)

PRINCIPLES OF LAW

“[O]bviousness requires a suggestion of all limitations in a claim.” *CFMT, Inc. v. Yieldup Intern. Corp.*, 349 F.3d 1333, 1342 (Fed. Cir. 2003) (citing *In re Royka*, 490 F.2d 981, 985 (CCPA 1974)).

Moreover, “[e]ven when obviousness is based on a single prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that reference.” *In re Kotzab*, 217 F.3d 1365, 1370 (Fed. Cir. 2000).

Thus, while the Supreme Court has emphasized the importance of a flexible approach to the obviousness question, the Court has nonetheless noted that the analysis requires a determination of “whether there was an apparent reason to combine the known elements *in the fashion claimed* by the patent at issue.” *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1740-41 (2007) (emphasis added). The Court has also pointed out that “[a] factfinder should be aware, of course, of the distortion caused by hindsight bias and must be cautious of arguments reliant upon *ex post* reasoning.” *Id.* at 1742.

Also, when evaluating claims for obviousness, “the prior art as a whole must be considered. The teachings are to be viewed as they would have been viewed by one of ordinary skill.” *In re Hedges*, 783 F.2d 1038,

1041 (Fed. Cir. 1986). Thus, it is ““impermissible within the framework of section 103 to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art.”” *Id.* (quoting *In re Wesslau*, 353 F.2d 238, 241 (CCPA 1965)).

The test of obviousness, therefore, is “whether the teachings of the prior art, taken as a whole, would have made obvious the claimed invention.” *In re Gorman*, 933 F.2d 982, 986 (Fed. Cir. 1991).

ANALYSIS

We do not agree with the Examiner that Poulton would have suggested to a person of ordinary skill an exercise method in which a stimulating signal is applied via an electrode in a moveable instrument to a user’s hand gripping the instrument, wherein the signal develops the muscle while the instrument is in motion, as recited in claim 1.

As the Examiner points out, Poulton discloses an embodiment of its methods in which a user may arm wrestle a machine, or another user at a remote location (*see* FF 15). Because the pressure or resistance applied to the user’s hand can be considered a stimulatory signal, we agree with the Examiner that, when claim 1 is given its broadest reasonable interpretation, Poulton discloses applying a stimulatory signal to the hand of a user gripping a moveable instrument.

However, claim 1 requires the gripped moveable instrument to “include[] an electrode configured to apply the signal.” That is, claim 1 differs from Poulton in that the signal applied in the arm-wrestling embodiment is not applied using an electrode.

We do not agree with the Examiner that Poulton would have suggested using a gripped electrode to provide a stimulatory signal to the hand of a user practicing the disclosed methods. We note, as the Examiner argues, that Poulton discloses applying electrical stimulation to the user in a number of embodiments (*see* FF 10-13, 16). Thus, Poulton discloses that electrical stimulation of muscles can enhance the efficiency or difficulty of an aerobic bicycle workout (FF 12), or simulate the effect of a baseball or opponent hitting or kicking the user (FF 13), by causing a muscle contraction to occur in response to a stimulus (FF 16).

However, the Examiner does not point to, nor do we see, any disclosure in Poulton explaining *why* one of ordinary skill in the art would have substituted the electrical signals applied in the bicycling or sports embodiments for the pressure and resistance applied in the arm-wrestling embodiment. Nor has the Examiner explained how including electrical stimulation in the arm-wrestling embodiment would emulate the sensations of actual arm wrestling, or supplement the sensations already applied through pressure and resistance. Rather, in our view, the disclosures of applying electrical stimulation to the user's muscles do not appear to be sufficiently related to the embodiments involving gripping such that one of ordinary skill would have combined those disclosures without hindsight.

We therefore agree with Appellants that the Examiner has not shown that Poulton would have suggested applying the signal recited in claim 1, in the manner claimed, to the hand of a user holding a moveable instrument. Because the Examiner has not adequately explained why all of the limitations in claim 1 would have been obvious to a person of ordinary skill

Appeal 2008-5077
Application 10/789,861

in the art, we reverse the Examiner's rejection of claim 1, and its dependent claims 2-5, as obvious over Poulton.

SUMMARY

We affirm the Examiner's rejection of claims 1, 6, 8-10, and 12-14 under 35 U.S.C. § 102(b) as anticipated by Guasco.

We reverse the Examiner's rejection of claims 8, 11, and 14 under 35 U.S.C. § 102(b) as anticipated by Mills.

We reverse the Examiner's rejection of claims 1-5 under 35 U.S.C. § 103(a) as obvious in view of Poulton.

AFFIRMED-IN-PART

lp

WARD AND SMITH, P.A.
1001 COLLEGE COURT
P.O. BOX 867
NEW BERN NC 28563-0867